

Parasitoids *Homolobus annulicornis* (Nees) (Hym.: Braconidae) and *Eumea linearicornis* (Zetterstedt) (Dipt.: Tachinidae) reared from larvae of the White-spotted Pinion moth *Cosmia diffinis* (L) (Lep.: Noctuidae), with notes on habitat of the host

Three larvae of the White-spotted Pinion moth *Cosmia diffinis* (L.) were found during searches in 2002 as part of Butterfly Conservation's *Action for Threatened Moths project*. All three were collected for rearing. Two out of the three produced parasitoids. The details are as follows:

One larva of the White-spotted Pinion, in its black-headed penultimate instar, was found by the author at Overhall Grove, Cambridgeshire (OS grid reference TL 332627) on 26 May 2002. Plate B shows the habitat in which the larva was found. The arrow marks the exact spot of the larval spinning, which was just above head height and several trees into a stand of tall but relatively immature Small-leaved Elms *Ulmus minor minor*.

The larva was collected for rearing and kept in a large plastic box in an unheated garage. During the rearing attempt it was noted that the larva emerged from its original leaf shelter to feed at night and returned to it to moult, entering its final instar on 30/31 May. In the final instar the head is reddish brown. By 3 June, the larva was becoming translucent with its dorsal heart visible and it had spun a light cocoon between an elm leaf and the paper lining the floor of the box by 7 June. On 25 June, a single red parasitoid wasp emerged and was active in the box. The wasp remained alive in the box until natural death on 28 June. The cocoon of the moth was then opened and inside was found the single, white, ovoid cocoon of dense silk spun by the wasp larva beside the head capsule and dried skin of the host (Plate C).

The wasp was subsequently identified by Dr Mark Shaw, of the National Museums of Scotland, as a male *Homolobus annulicornis* (Nees) (Hymenoptera: Braconidae: Homolobinae). Dr Shaw reports that this wasp, which has been misidentified as *H. testaceator* in British literature, is widespread but rather rare in Britain. It has been recorded from the larvae of various noctuid moths including the Lead-coloured Drab *Orthosia populeti* (Fabr.), the Dingy Shears *Parastichtis ypsilon* (D. & S.) and the Double Square-spot *Xestia triangulum* (Hufn.), which are not particularly closely related taxonomically, nor in behaviour. *Homolobus annulicornis* is the second species of parasitic wasp recorded from larvae of the White-spotted Pinion during the present study, the first being *Meteorus gyrator* (Thunberg) (Hymenoptera: Braconidae: Meteorinae) (see Waring 2001).

Two White-spotted pinion larvae were found at Duck End Farm, Park Lane, Dry Drayton, Cambridgeshire (TL 383619) on 3 June 2002, during one hour of searching for spun leaves, by Ruth Edwards, the owner of the site, and by the author. We each found one spinning, the first after 23 minutes of search and the second within three metres of the first, five minutes later. Both larvae were in the final instar, about 25mm in length with reddish heads. Plate D shows Ruth with her right hand on the exact position in the foliage in which she found her spinning.

Both larvae were found in similar positions, at shoulder-height on the outer foliage of a shelter-belt of tall Small-leaved Elms. This is confirmation that breeding occurs



Plate B. *Cosmia diffinis* breeding site, Overall Grove, Cambridgeshire, 26 May 2002. Arrow shows position of larval spinning.



Plate C. *Homolobus annulicornis* with cocoon and remains of host *Cosmia diffinis* larva.



Plate D. *Cosmia diffinis* breeding site, Duck End Farm, Dry Drayton, Cambridgeshire, 3 June 2002. The position of the larval spinning is by Ruth Edwards' right hand.



Plate E. *Eumecurus linearicornis*. Two with puparia, and remains of host *C. diffinis* larva.

on the outside, as well as within, shelterbelts (as in Waring, *Ent. Rec.* **113**: 135-138) and deep in woodland (see Waring, *Ent. Rec.* **114**: 115-117). Both of these references include photographs of the habitat for comparison. One of the larvae collected at Duck End Farm in 2002 pupated successfully and produced a male White-spotted Pinion. The other produced two fly larvae which emerged from the moth caterpillar just before it was about to pupate, on 7 or 8 June 2002 (Plate E). The adult flies emerged from the puparia on 23 and 25 June and remained alive in the rearing box until natural death on 28 June. The box was kept in an unheated room throughout. The flies were identified by John Chainey of the Natural History Museum, London, as *Eumea linearicornis* (Zett.) (Tachinidae), the same species as previously identified by Nigel Wyatt, from a White-spotted Pinion larva collected at Boxworth, Cambridgeshire, 4km away, in May 2000 (Waring, *Ent. Rec.* **113**: 135-138). This fly is a widespread species in southern Britain north to the Midlands and Wales. It has also been recorded from the Lunar-spotted Pinion *Cosmia pyralina* (D. & S.) as well as a number of other noctuid moths and from some tortricoids and pyralids.

Of the seven larvae of the White-spotted Pinion found between 2000 and 2002, from three sites, four have proved to be parasitised and three species of parasites are involved.

The author wishes to thank all the above named for their help with these observations, which took place as part of the UK Biodiversity Action Plan project on this moth, administered by Butterfly Conservation as part of the *Action for Threatened Moths project*, part-funded by English Nature.— PAUL WARING, 1366 Lincoln Road, Werrington, Peterborough PE4 6LS.

On the doubtful Moray record of *Lepyrus capucinus* (Schaller) (Col.: Curculionidae)

Prof. M. G. Morris (2002. *True Weevils* 1: 72) mentions a putative record from Moray given by Hyman & Parsons (1992. *A review of the scarce and threatened Coleoptera of Great Britain Part 1*. UK Nature Conservation, number **3**. JNCC), of this species – one of our very rarest weevils. As the record was due to me, some explanation is called for.

Its basis is a letter from the late Philip Harwood in 1947, mentioning the locality as “Boat of Garten” (pine woods beside Loch Garten, Morayshire). I was unable to locate the insect in Harwood’s collection in later years: if not still there, it is probably in the Oxford University Museum General Collection of British Coleoptera. The Berkshire specimen was found “floating in an open tank” at Wellington College, near Bracknell, 31.iii.1897 (L. M. Bucknill, 1897, *Ent. mon. Mag.* **33**: 141).— A. A. ALLEN, 49 Montcalm Road, London SE7 8QG.